

GLOSSARY

AA - antiaircraft

acquisition range - sensor range against a category of targets. Targets are usually categorized as infantry, armored vehicles, or aircraft. Acquisition includes four types (or levels of clarity, in ascending order of clarity): detection, classification, recognition, and identification. Where the type of acquisition is not specified, the acquisition range will be regarded as sufficient for accurate targeting. This range is comparable to the former Soviet term *sighting range*.

AAM - air-to-air missile

AD - antihandling device (mines)

ADHPM - artillery-delivered high-precision munition. This term can be used to describe various artillery precision munitions, including guided, terminally homing, SAL-homing, and course-corrected mortar and cannon rounds and rockets.

AGL - automatic grenade launcher

AIFV - airborne infantry fighting vehicle

aka - also known as

ALCM - air-launched cruise missile

AL/RDX - aluminized RDX (ammunition) is an enhanced blast filler with aluminum added to the RDX high explosive, often used in Russian Frag-HE munitions with increased lethality.

AM - amplitude modulated (communications)

antitank - functional area and class of weapons characterized by destruction of tanks. In the modern context used in this guide, the role has expanded to fit the term "antiarmor" (which includes systems and munitions which can be employed against light armored vehicles)

AP - antipersonnel

APAM - antipersonnel - anti-materiel (ammunition)

APE - armor-piercing explosive (ammunition)

APERS-T - antipersonnel - tracer (ammunition)

APC - armored personnel carrier

APC-T - armor-piercing capped tracer (ammunition)

AP HE - armor-piercing high explosive (ammunition)

API-T - armor-piercing incendiary tracer (ammunition)

APERS-T - antipersonnel tracer (ammunition)

APT - armor-piercing tracer (ammunition)

APU - auxiliary power unit; auxiliary propulsion unit

ARM - anti-radiation missile. The missile homes in on the radar pulse to kill a radar system.

ASM - air-to-surface missile

AT - antitank

ATGL - antitank grenade launcher

ATGM - antitank guided missile

aux - auxiliary

average cross-country (speed) - vehicle speed (km/hr) on unimproved terrain without a road

AVLB - armored vehicle-launched bridge

burst (rate of fire) - artillery term: the greatest number of rounds that can be fired in 1 minute
BW - biological warfare, including ammunition type.

cal - caliber

caliber - barrel length to gun bore ratio (for all gun systems), and used as a measure of gun barrel size or as a component of ammunition/gun size; in the case of US-made infantry weapons, diameter of ammunition/gun bore only, measured in inches, and used to describe ammunition/gun size

canister - close-range direct-fire ammunition which dispenses a fan of flechettes forward

C - centigrade

CC - cargo-carrying (ammunition)

CCD - cover, concealment, and deception; also charged-coupled device, an imaging sensor which operates in the visual and near-IR bands, with day and limited night capability.

CCM - counter-countermeasure

CE - chemical energy: the class of ammunition which employs a shaped charge for the lethal mechanism. Ammunition types which employ CE include HEAT and HESH (see below).

Chem - chemical (ammunition type)

CM - countermeasure

coax - coaxial

CRV - combat reconnaissance vehicle

CW - continuous wave (communications)

cyclic (rate of fire) - maximum rate of fire for an automatic weapon (in rd/min)

decon - decontamination

direct-fire range - maximum range of a weapon, operated in the direct-fire mode, at which the bullet's trajectory will not rise above the height of the intended point of impact on the target. At this range, the gunner is not required to adjust for range in order to aim the weapon. The comparable Russian term is *point blank range*.

DPICM - dual-purpose improved conventional munitions (ammunition)

DPICM-BB - dual-purpose improved conventional munitions, base-bleed (ammunition)

DU - depleted uranium (ammunition)

DVO - direct-view optics

ECM - electronic countermeasure

EFP - explosively-formed penetrator (ammunition); kinetic-energy penetrator which is created by a plate, shaped into a slug by an explosive charge, then propelled by it to a target

EIOC - estimated IOC

EMD - engineering, manufacture and development. Fielding phase between prototype and IOC.

EMP - electro-magnetic pulse, including ammunition type. The pulse can kill electronic microcircuits in a target area.

EO - electro-optic, electro-optical

ERA - explosive reactive armor

ERFB - extended range full-bore (ammunition)

ERFB-BB - extended range full-bore, base-bleed (ammunition)

est - estimate

ET - electronic timing (ammunition fuze type)

European - from a consortium of firms located or headquartered in several European countries

EW -electronic warfare

FCS - fire control system

FFAR - folding-fin aerial rockets

FAE - fuel-air explosive (ammunition). This munition technology is employed in aerial bombs and artillery munitions, and uses a dispersing explosive fill to produce intense heat, a long-duration high-pressure wave, and increased HE blast area

flechette – small steel darts (much like nails) used to fill artillery rounds (and some bombs). Generally thousands of these darts are fired (similar to a shotgun in an anti-personnel role) dispensing the flechettes forward over a wide area. Unlike **canister rounds**, FSU artillery rounds use a time fuze, permitting close-in direct fire, long-range direct fire, and indirect fire.

FH - frequency-hopper (radio, communications)

FLIR - forward-looking infrared (thermal sensor)

FLOT - forward line of own troops

FM - frequency modulated (communications)

FOV - field of view

frag-HE - fragmentation-high explosive (ammunition)

FSU - former Soviet Union

GCS - ground control station

gen - generation. Equipment such as APS and (thermal and II) night sights are often categorized in terms of 1st, 2nd or 3rd generation of development, with different capabilities for each.

GP MG - general purpose machinegun

GPS - global positioning system

HE - high explosive (ammunition)

HEAT - high-explosive antitank (also referred to as shaped-charge ammunition)

HEAT-FS - high-explosive antitank, fin-stabilized (ammunition)

HEAT-MP - high-explosive antitank, multi-purpose

HEFI - high-explosive fragmentation incendiary (ammunition)

HEI - high-explosive incendiary (ammunition)

HEP-T - high explosive plastic-tracer (ammunition)

HESH - high-explosive squash head (ammunition)

HF - high frequency (communications)

hps - hops per second (communications)

HUD - head-up display

HVAP-T - hypervelocity, armor-piercing tracer (ammunition)

ICM - improved conventional munition (ammunition, round containing submunitions/grenades)

IFF - identification friend-or-foe

IFV - infantry fighting vehicle - improved conventional munition; frag-He bomblet submunition **II** - image intensification (night sighting system)

ILS - instrument landing system

INA - information not available

incend - incendiary

IOC - interim operational capability

IR - infrared

IRBM - intermediate-range ballistic missile (3,001-5,500 km)

I-T - incendiary - tracer (ammunition)

K-kill - catastrophic kill (simulation lethality data)

kbits - kilobites per second (communications)

KE - kinetic energy: class of ammunition which transfers energy to the target for the lethal mechanism. Ammunition types which employ KE include AP, APFSDS-T, and HVAP-T.

LAFV - light armored fighting vehicle

LLTV - low-light-level television

LMG - light machinegun

LRF - laser rangefinder

mach - speed of sound, based on atmospheric conditions (1160 km/h at sea level)

max - maximum

maximum aimed range - maximum range of a weapon (based on firing system, mount, and sights) for a given round of ammunition, while aiming at a ground target or target set with sights in the direct-fire mode. The range is not based on single-shot hit probability on a point target, rather on tactical guidance for firing multiple rounds if necessary to achieve a desired lethality effect. One writer referred to this as *range with the direct laying sight*. Even greater ranges were cited for *salvo fire*, wherein multiple weapons (e.g., tank platoon) will fire a salvo against a point target.

max effective range - maximum range at which a weapon may be expected to achieve a high single-shot probability of hit (50%) and a required level of destruction against assigned targets. This figure may vary for each specific munition and by type of target (such as infantry, armored vehicles, or aircraft).

max off-road (speed) - vehicle speed (km/hr) on dirt roads

MCLOS - manual command-to-line-of-sight

MG - machinegun

Mk - Mark

MRBM - medium-range ballistic missile (1,001-3,000 km)

MRL - multiple rocket launcher

MMW - millimeter wave (sensor mode, band in the electromagnetic spectrum)

MVV - muzzle velocity variation (RF tracker for monitoring round-to-round variations in muzzle velocity variations due to tube wear, or for tracking artillery course-corrected rounds for command course adjustment)

N/A - not applicable

NBC - nuclear, biological, and chemical

Nd - neodymium, type of laser rangefinder

NFI - no further information

normal (rate of fire) - artillery term: rate (in rd/min) for fires over a 5-minute period

NVS - night-vision system

Nuc - nuclear (ammunition type)

NVG - night-vision goggle

PD - point-detonating (ammunition fuze type)

penaid - Penetration aid, countermeasure system in the warhead to counter air defense weapons effectiveness.

Ph - probability of hit (simulation lethality data)

PIBD - point-initiating base-detonating (ammunition fuze type)

pintel - post attached to a firing point or vehicle, used to replace the base for a weapon mount

Pk - probability of kill (simulation lethality data)

Poss - possible

practical (rate of fire) - maximum rate of fire for sustained aimed weapon fire against point targets. The rate includes reload time and reduced rate to avoid damage from overuse. Former Soviet writings also refer to this as the **technical rate of fire**.

RAP - rocket-assisted projectile (ammunition type)

ready - rapid detectability under normal mobility conditions (mines)

mirecon - reconnaissance

rd - round

ready rounds - rounds available for use on a weapon, whether in autoloader or in nearby stowage, which can be loaded within the weapon's stated rate of fire

RF - radio frequency

RHA - rolled homogeneous armor, often used as a standard armor hardness for measuring penetration of anti-tank munitions

RHAe - RHA equivalent, a standard used for measuring penetrations against various type armors

rpm - rounds per minute (aircraft)

RV - reentry vehicle. That portion of a TBM separating (or multiple separating) warhead which reenters the atmosphere and maneuvers to the target.

SACLOS - semiautomatic command-to-line-of-sight

SAL - semi-active laser; guidance method used in precision munitions, such as ADHPM, and ATGMs.

SAM - surface-to-air missile

SHF - super high-frequency (sensors)

SFM - sensor-fuzed munition (artillery ammunition)

shp - shaft horsepower (aircraft)

SLAP - saboted light armor penetrator (ammunition). Small arms/machinegun round with a sub-caliber penetrator guided down a gun bore by sabots, designed to defeat light armor.

SP - self-propelled

SOF - special operations forces

SRBM - short-range ballistic missile (0-1,000 km)

SSM - surface-to-surface missile (can include IRBM, MRBM, or SRBM, or cruise missile)

stadimetric - in this guide, a method of range-finding using stadia line intervals in sights and target size within those lines to estimate target range

stowed rounds - rounds available for use on a weapon, but stowed and requiring a delay greater than that for ready rounds (and cannot be loaded within the weapon's stated rate of fire)

sustained (rate of fire) - artillery term: rate (in rd/min) for fires over the duration of an hour

tactical AA range - maximum targeting range against aerial targets, aka: **slant range**

TAR - target acquisition radar

TBM - theater ballistic missile

TEL - transporter-erector-launcher. Vehicle which carries, raises, and launches TBMs.

TELAR - transporter-erector-launcher and radar

thermobaric - HEI volumetric (blast effect) explosive technology similar to fuel-air explosive and used in shoulder-fired infantry weapons and ATGMs

TLAR - transporter-launcher and radar

TOF - time of flight (seconds)

TTP - tactics, techniques, and procedures

TTR - target tracking radar

TV - television (sensor mode)

UAV - unmanned aerial vehicle, class of unmanned aerodynamic systems which include remotely piloted vehicles and preprogrammed (drone) aircraft

UHF - ultra-high frequency (communications)

UI - unidentified

VEESS - vehicle engine exhaust smoke system

VHF - very high frequency (communications)

volumetric - class of explosive ammunition fill which produces high long-duration blast and heat (includes thermobaric and FAE)

vs - versus

w/ - with (followed by associated object)

WMD - weapons of mass destruction (ammunition type). These generally consist of nuclear, bacteriological, and chemical munitions.

WP - white phosphorus (ammunition)